

[Submitting Counsel on Signature Page]

UNITED STATES DISTRICT COURT
NORTHERN DISTRICT OF CALIFORNIA
SAN FRANCISCO DIVISION

IN RE JUUL LABS, INC., MARKETING,
SALES PRACTICES, AND PRODUCTS
LIABILITY LITIGATION

Case No. 19-md-02913-WHO

**PLAINTIFFS' *DAUBERT* MOTION TO
PRECLUDE TESTIMONY BY DR.
JEFFREY ARNETT REGARDING
HEALTH RISKS OF JUUL USE**

This Document Relates to:
ALL ACTIONS

**Judge: Hon. William H. Orrick
Date: February 25, 2022
Time: 1:30 PM
Ctrm.: 2**

INTRODUCTION

Plaintiffs seek to preclude Defendant JLI's expert Jeffrey Arnett, a developmental psychologist, from testifying regarding the health risks presented by JUUL use, including the risks presented by JUUL use as compared to those presented by smoking combustible cigarettes, and from suggesting that Plaintiffs' experts are contributing to a public health crisis through their participation in this litigation.

LEGAL STANDARD

To be admissible, expert testimony must (1) "help the trier of fact to understand the evidence or to determine a fact in issue," (2) be "based on sufficient facts or data," (3) be "the product of reliable principles and methods," and (4) "reliably appl[y] the principles and methods to the facts of the case." Fed. R. Evid. 702.

Only relevant and reliable expert opinion testimony is admissible. *See Daubert v. Merrell Dow Pharm.*, 509 U.S. 579, 589, 113 S.Ct. 2786, 125 L.Ed.2d 469 (1993). Expert testimony is reliable "if the knowledge underlying it has a reliable basis in the knowledge and experience of the relevant discipline." *Primiano v. Cook*, 598 F.3d 558, 565 (9th Cir. 2010). The court's "task ... is to analyze not what the experts say, but what basis they have for saying it." *Daubert v. Merrell Dow Pharmaceuticals, Inc.*, 43 F.3d 1311, 1316 (9th Cir. 1995) (*Daubert II*). Expert testimony must "relate to scientific, technical, or other specialized knowledge, which does not include unsubstantiated speculation and subjective beliefs." *Cooper v. Brown*, 510 F.3d 870, 942 (9th Cir. 2007).

In determining whether to allow expert testimony, a court may consider whether the expert is testifying "about matters growing naturally" out of their own independent research, or if "they have developed their opinions expressly for purposes of testifying." *Daubert II*, 43 F.3d 1311 at 1317. Regardless of an expert's credentials, where "there is simply too great an analytical gap between the data and the opinion proffered," a court cannot permit the expert to testify. *Rodman v. Otsuka Am. Pharm., Inc.*, No. 20-16646, 2021 WL 5850914 (9th Cir. Dec. 9, 2021) (quoting *General Elec. Co. v. Joiner*, 522 U.S. 136, 146 (1997)).

The burden is on the proponent of the expert testimony to show, by a

preponderance of the evidence, that the admissibility requirements are satisfied. *Lust By & Through Lust v. Merrell Dow Pharm., Inc.*, 89 F.3d 594, 598 (9th Cir. 1996); *see also* Fed. R. Evid. 702 Advisory Committee Notes. The Court’s gatekeeping role in assessing relevance and reliability of expert testimony is “vital to ensure accurate and unbiased decision-making by the trier of fact.” *Cooper*, 510 F.3d 870 at 943.

ARGUMENT

Dr. Arnett is a developmental psychologist. Ex. A, Arnett Dep. at 35:16-22. He is not a toxicologist and readily admits he has “no expertise in toxicology.” *Id.* at 241:18-25 (“I don’t claim to have expertise in toxicology[.]”). He nevertheless offers opinions on the relative health risks of JUUL and combustible cigarettes and repeatedly volunteered at deposition that he had “read a lot about the relative effects on health[.]” *id.*, and considers “the vast difference in health effects and the potential of ENDS products for harm reduction” to be a “key part” of his testimony. *Id.* at 243:11-20.

Dr. Arnett has testified many times in cases brought against the major domestic cigarette manufacturers, particularly on the subject of youth marketing. His opinions in this case are summarized in his report as follows:

- “Plaintiffs’ experts have not shown that JUUL’s product design and marketing actually appealed to youth or increased youth appeal of JUUL products;
- JLI did not follow Big Tobacco’s advertising “playbook” in terms of how it marketed its products, and JLI’s marketing differed from prior Big Tobacco marketing efforts in several key respects;
- JLI has taken affirmative steps to curb youth access to JUUL products, another departure from Big Tobacco’s “playbook”; and
- Adolescents are more likely than adults to try and use substances like nicotine due to developmental factors particular to the adolescent developmental stage.”

Ex. B, Arnett Rpt. at 3.

Notably and appropriately absent from this summary is any mention of the toxicological profile of JUUL aerosols or the potential health effects of using JUUL.

Nevertheless, Dr. Arnett’s report is laced with comments on both subjects, and he repeatedly

1 injected these issues into deposition testimony regardless of the questions actually asked of him
2 (as detailed below).

3 Plaintiffs seek to preclude Dr. Arnett from testifying regarding: (1) the chemical or
4 toxicological profile of JUUL e-liquids or aerosols (beyond the fact that they contain the
5 addictive chemical nicotine, which is pertinent to some of his opinions concerning adolescent
6 psychology); (2) the toxicity of JUUL aerosol, standing alone or relative to the toxicity of
7 cigarette smoke; and (3) the potential short-term and long-term health hazards posed by use of
8 JUUL, standing alone or relative to the hazards posed by use of combustible cigarettes. Plaintiffs
9 also seek to exclude Dr. Arnett's blanket *ad hominem* attacks on Plaintiffs' experts, as detailed
10 below. This includes the following opinions set forth in Dr. Arnett's report (although omitted
11 from his summary of his opinions), each of which is beyond his expertise in
12 adolescent/developmental psychology:

13 "JLI's product does, indeed, contain nicotine, but its product was specifically
14 designed to *and did* reduce the harms associated with combustible cigarettes for
longtime smokers[.]" Ex. B at 11 (citing nothing) (emphasis added).

15 "Recent public health and scientific evidence shows that e-cigarettes like JUUL
16 dramatically reduce harmful chemicals and other health harms attributable to
17 combustible cigarettes." *Id.* at 13 & n.37 (citing defense expert Jack
Henningfield's class deposition, defense expert Dennis Paustenbach's class report,
and two scientific articles).

18 "I understand JLI also made a much safer product than combustible cigarettes,
19 with 'substantially fewer' long-term health effects.... JLI designed a more
20 expensive product that had safety redundancies and that 'incorporate[s] several
21 consumer protections, including sophisticated temperature control system which is
optimized to maintain the temperature needed for optimal vaporization and to
avoid combustion and generation of smoke." *Id.* at 15 & n.47 (quoting Adam
Bowen's deposition).

22 "JUUL ENDS ... do not contain most of the toxins that are in cigarettes and
23 cigarette smoke." *Id.* at 16 & n.49 (quoting Jack Henningfield's class expert
report).

24 "There is a growing scientific consensus that e-cigarettes like JUUL are in fact
25 much less harmful compared to combustible cigarettes." *Id.* at 35-36 (citing
nothing).

26 In deposition, Dr. Arnett went much further and repeatedly (even when no question was pending)
27 berated Plaintiffs' experts for subverting public health by claiming that JUUL poses the same or
28 greater risks to health than combustible cigarettes (an inaccurate representation for which Dr.

Arnett could cite no specific testimony or opinions from Plaintiffs' experts). Below are just two examples from Dr. Arnett's deposition that reveal what may be expected at trial if he is not reined in—namely, nonresponsive pontification on JUUL's purported harm reduction while categorically vilifying Plaintiffs' experts:

18 Q. You don't have any -- you don't
 19 claim to have expertise in toxicology, right?
 20 A. No, I don't have -- I don't
 21 claim to have expertise in toxicology, but
 22 I've read a lot about the relative effects on
 23 health and -- and mortality for cigarettes
 24 versus ENDS products, and it's a dramatic
 25 difference.
 1 For example, I read the FDA
 2 decision on Vuse cigarettes -- Vuse, excuse
 10 3 me, ENDS products that came out recently and
 4 also JUUL's submission to the FDA regarding
 11 5 their products.
 6 Those were both very
 12 7 informative and comprehensible for me in
 8 terms of the relative health effects of ENDS
 13 9 products versus cigarettes, the dramatic
 10 10 difference between them, which I think is
 14 11 another thing that --
 12 MS. LONDON: Doctor, I have to
 15 13 stop you --
 14 THE WITNESS: No, no. I get to
 16 15 finish my answer. Excuse me. Thank
 16 16 you. I get to answer however I wish,
 17 17 and you know that.
 18 That's another thing that your
 19 19 experts avoid. They want to talk
 20 20 about cigarettes and ENDS products as
 21 21 if they have the same health effects
 22 22 and they're equally damaging to
 20 23 health.
 24 They never -- they never
 21 25 acknowledge that ENDS products are
 22 1 effective for harm reduction on people
 23 2 who -- who otherwise are addicted to
 3 nicotine, and to me, that's a key
 23 4 issue.
 5 So I do understand that. I
 24 6 have read that scientific information,
 7 and I believe I understand it well,
 25 8 and I've -- I trust the reports and
 9 the judgment of the people who have
 26 10 reported on those topics.
 11 And then to me, that's an
 27 12 important part of what I'm doing, is
 13 trying to draw that distinction
 28 14 between cigarettes and ENDS products,

15 both in the marketing and in --
 16 marketing and advertising, and in the
 17 vast difference in the health effects
 18 and the potential of ENDS products for
 19 harm reduction. That's a key part of
 20 this for me.

Ex. A at 241:18-243:20.

24 **Q.** I'm just asking you straight
 25 up: In 2017, how much did cigarette smoking
 1 decline in this country among kids?

2 **A.** That's -- I don't know the
 3 tenth of percentage of what it was, and in
 4 any case, there are different sources used
 5 for those data.
 6 So what we know is what I've
 7 discussed previously, which is that it's gone
 8 down steadily since 1998 and it's lower now
 9 than it's ever been.

10 **Q.** All right. And then --

11 **A.** It continues to decline --
 12 excuse me. It's continued to decline since
 13 use of ENDS products became prevalent. In
 14 fact, as Balfour and colleagues describe in
 15 that article, the decline has been even
 16 steeper since ENDS products have become
 17 popular among adolescents.
 18 So their argument in that
 19 article, which I agree with and I think is
 20 very well founded, is that most of the
 21 adolescent use of ENDS product has come at
 22 the expense of cigarettes.
 23 And because it's -- because
 24 ENDS products are so dramatically less
 25 damaging to health, that's something that
 1 should be regarded as a favorable
 2 development.

3 And that the scare tactics that
 4 are being used by people like your experts
 5 that make it sound like use of ENDS products
 6 is as bad or worse than the use of cigarettes
 7 is really damaging, is damaging the public
 8 health to create a boogeyman of use of ENDS
 9 products that doesn't exist.

10 It's not founded on science.
 11 It's based on conflating the health effects
 12 with cigarettes with the health effects of
 13 vaping, which are not at all comparable.

14 **MS. LONDON:** All right, Doctor.

15 I --

16 **A.** The result of it is damage --
 17 the result of what your experts are doing is
 18 to damage public health.

19 MS. LONDON: Doctor,
 20 respectfully --
 21 A. I'm sure that's not how they
 22 see it. I'm sure that's not how they
 23 believe -- what they believe they're doing,
 24 but the fact is, that's the end result of it,
 25 is to damage public health by creating these
 1 unfounded, unverified, false fears about the
 2 health effects of vaping. It's very
 3 unfortunate.
 4 And Balfour and colleagues, who
 5 don't take a side, who aren't testifying on
 6 behalf of expert -- of plaintiffs or
 7 defendants in this case, whose may -- whose
 8 interest is solely in public health, that's
 9 what they conclude.

10 *Id.* at 235:24-238:9.

11 Dr. Arnett gave a virtually identical speech on several additional occasions during
 12 his deposition. *See id.* at 157:12-160:25 (no question pending); 223:4-224:25 (no question
 13 pending); 244:5-245:2; 250:23-253:5 255:5-256:2; 256:11-257:9.¹

14 Dr. Arnett's non-responsive speeches are inappropriate for a host of reasons, not
 15 the least of which is his lack of any qualifications to opine on the health risks posed by JUUL,
 16 either standing alone or in comparison to cigarettes. He does not know what chemicals are present
 17 in JUUL aerosols and has made no effort to quantify or compare exposures between JUUL and
 18 cigarettes. Instead, he cites testimony by other defense experts (including public health expert
 19 Jack Henningfield and toxicology expert Dennis Paustenbach) and two articles, one of which
 20 refutes his opinion regarding data on long-term health effects, as discussed below. He cites no
 21 empirical support, conducted no independent assessment of the matter, and would not be qualified
 22 to do so in any event. As noted above, Dr. Arnett has no training in toxicology. *Id.* at 241:18-25.
 23 While he claims to have "read a lot" about the relative health risks of JUUL and combustible
 24 cigarettes, *id.* at 241:22, it is clear he knows very little:

- 25 • Dr. Arnett could not identify the ingredients in JUUL e-liquids beyond the
 26 fact that they contain nicotine, and he skirted the question by saying
 27 "[t]hat's not something that's part of the range of my testimony." *Id.* at
 28 250:16-22. Yet, in the next response he said he "would be happy to testify

¹ Judge Larson was called into the deposition and instructed the witness to stop giving such responses. *See* Ex. A at 257:10-258:3.

1 that your experts, unfortunately, like quite a few other people in public
 2 health, have vastly overblown the health dangers of ENDS products and
 3 completely ignored their harm-reduction potential. And consequently, they
 4 have fanned the hysteria in the general public that's really damaging." *Id.*
 5 at 251:4-11.

- 6 • He does not know any of the byproducts in JUUL aerosol (and, therefore,
 7 how they might compare to cigarettes) because that's "not an area of [his]
 8 expertise." *Id.* at 254:13-25.
- 9 • He doesn't know the safe levels (and, therefore, the unsafe levels) for any
 10 of JUUL's chemical constituents because he is "not an expert on chemical
 11 constituents of anything." *Id.* at 255:5-10.
- 12 • Despite the fact that he cites to JUUL's reduced delivery of "toxins" as
 13 compared to cigarette smoke, Ex. B at 16 & n.49, he believes that a 90%
 14 reduction of chemicals in a cigarette would not render them safe. Ex. A at
 15 258:6-13.
- 16 • He "certainly" would testify that JUUL use has substantially fewer long-
 17 term health effects than smoking and claims there is "strong scientific
 18 evidence for that" *Id.* at 245:3-14. Yet he admits that he doesn't know the
 19 long-term health effects of using JUUL and he doesn't think anyone else
 20 knows. *Id.* at 247:7-17. When asked what data he has to support his
 21 opinion on JUUL's reduced long-term health effects, he cited one article,
 22 "the Balfour et al. 2021" paper², which he says is "the source of my
 23 opinions on that topic." *Id.* at 253:21-254:11. Not only is the Balfour paper
 24 not specific to JUUL, but it states unequivocally: "There are no data on
 25 long-term health effects, reflecting the relative novelty of vaping and the
 26 rapid evolution of vaping products." Ex. C at 1662 (emphasis added).
 27 Balfour also notes that "[h]igh-quality clinical and epidemiological data on
 28 vaping's health effects are relatively sparse" and that "[d]etermining even
 short-term health effects in adults is difficult[.]" *Id.*

18 Finally, at deposition, Dr. Arnett repeatedly excoriates Plaintiffs' experts for "conflating"
 19 JUUL with cigarettes in terms of their "health effects," which he deems damaging to public
 20 health. Without citing anything more than the Balfour paper discussed above, he repeatedly
 21 interjects *ad hominem* attacks on Plaintiffs' experts, often in non-responsive speeches. *Id.* at
 22 44:11-14; 44:21-23 (no question pending); 158:22-160:25 (no question pending; calling it a
 23 "preposterous comparison" and "nonsense" that "has no basis in reality" and accusing Plaintiffs'
 24 experts of "pretend[ing] the two are exactly the same"); 162:2-21 (calling Plaintiffs' expert
 25 opinions "facile" and "far-fetched"); 236:10-238:9 (referring to "scare tactics that are being used
 26 by people like your experts" and damaging public health "by creating the unfounded, unverified,
 27

28 ² See Ex. C, David J. K. Balfour, et al., *Balancing Consideration of the Risks and Benefits of E-Cigarettes*, 111 Am. J. Public Health 9 (2021).

1 false fears about the health effects of vaping”); 244:5-24 (claiming Plaintiffs’ experts “treat
 2 cigarettes as ENDS products as if they are identical” which is “misleading people” and
 3 “damaging to public health” by creating a “vast misunderstanding” regarding potential harm
 4 reduction); 252:9-253:12 (accusing Plaintiffs’ expert of “conflating cigarettes and ENDS
 5 products,” which is “baseless” and “extremely weak”).

6 When asked to identify any Plaintiffs’ expert who had said JUUL is as dangerous
 7 or more dangerous than cigarettes, Dr. Arnett named no one and retreated to a general accusation
 8 that it’s “a theme in all the expert reports that I’ve read,” which he deems “irresponsible and
 9 false.” *Id.* at 329:14-330:16. Given Dr. Arnett’s repeated accusations that Plaintiffs’ experts were
 10 “mislead[ing]” people and damaging public health by “fann[ing] a public hysteria” and “grossly
 11 exaggerate[ing] the health harms of vaping,” *id.* at 255:17-23, he was asked what public
 12 statements were made by any Plaintiffs’ expert equating the harms of smoking and JUUL use. He
 13 could cite none and admitted he was “not talking about their public statements.” *Id.* 331:3-332:12.
 14 Not to miss an opportunity, however, he added that by “eventually” giving “public testimony that
 15 distorts the public health picture, they’re doing the public a disservice and they’re damaging
 16 public health.” *Id.* 332:13-333:1.

17 CONCLUSION

18 For the foregoing reasons, Plaintiffs respectfully request that the Court enter an
 19 Order precluding Dr. Arnett from testifying regarding the health risks presented by JUUL use,
 20 including the risks presented by JUUL use as compared to those presented by smoking
 21 combustible cigarettes, and engaging in unsubstantiated attacks on Plaintiffs’ experts as causing
 22 or fanning the flames of a public health crisis.

1 Dated: December 31, 2021

Respectfully submitted,

3 By: /s/ Sarah R. London

4 Sarah R. London
5 **LIEFF CABRASER HEIMANN &**
6 **BERNSTEIN LLP**
7 275 Battery Street, Fl. 29
8 San Francisco, CA 94111
9 Telephone: (415) 956-1000
slondon@lchb.com

10 By: /s/ Dena C. Sharp

11 Dena C. Sharp
12 **GIRARD SHARP LLP**
13 601 California St., Suite 1400
14 San Francisco, CA 94108
15 Telephone: (415) 981-4800
dsharp@girardsharp.com

16 By: /s/ Dean Kawamoto

17 Dean Kawamoto
18 **KELLER ROHRBACK L.L.P.**
19 1201 Third Ave., Ste. 3200
20 Seattle, WA 98101
21 Telephone: (206) 623-1900
dkawamoto@kellerrohrback.com

22 By: /s/ Ellen Relkin

23 Ellen Relkin
24 **WEITZ & LUXENBERG**
25 700 Broadway
26 New York, NY 10003
27 Telephone: (212) 558-5500
erelkin@weitzlux.com

28 *Co-Lead Counsel for Plaintiffs*

CERTIFICATE OF SERVICE

I hereby certify that on December 31, 2021, I electronically filed the foregoing document with the Clerk of the Court using the CM/ECF system, which will automatically send notification of the filing to all counsel of record.

By: /s/ Sarah R. London
Sarah R. London